



TITLE:

A case of renal ptosis treated with hochu-ekki-to with improvement confirmed by excretory urography

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RIGHT:

A CASE OF RENAL PTOSIS TREATED WITH HOCHU-EKKI-TO WITH IMPROVEMENT CONFIRMED BY EXCRETORY UROGRAPHY

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A 59-year-old woman visited our clinic with complaints of right back dull pain. Excretory urography showed bilateral renal ptosis (a 6 cm decrease in position of the right kidney and a 5 cm decrease of the left kidney). She was treated with 7.5 g/day of Hochu-ekki-to. After 6 months, her symptoms improved and after 8 months excretory urography showed a 3 cm decrease in the position of both kidneys. Hochu-ekki-to might be useful for the conservative therapy of renal ptosis.

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Key words: Renal ptosis, Japanese herbal medicine, Hochu-ekki-to

INTRODUCTION

Kidneys are remarkably mobile organs, and their positions vary with inspiratory and expiratory movement of the diaphragm as well as with the change of position from upright to supine. Increased renal mobility is defined as relative decrease in position of greater than 2.0 vertebral body height on the right side and 1.75 vertebral body height on the left side¹⁾. We report a case of renal ptosis treated with Hochu-ekki-to for which excretory urography confirmed improvement.

CASE REPORT

A 59-year-old woman visited our clinic with complaints of right back dull pain for more than 4 years. She was slender, and her height and body

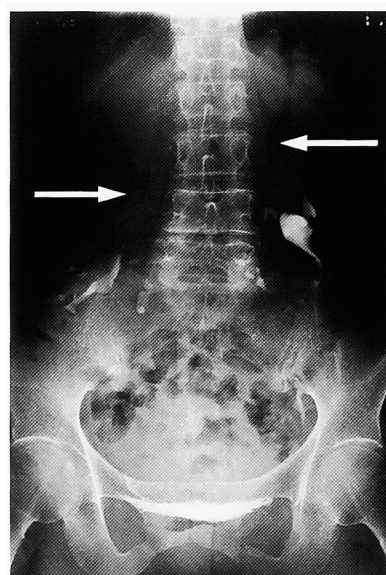


Fig. 1B. Excretory urography showing a 6- and 5 cm descent of right and left kidneys in the upright position.



Fig. 1A. Each kidney shown in the supine position before the treatment. The arrows indicate the upper pole of the kidney.

weight were 156 cm and 42 kg, respectively. Urinalysis showed a microscopic hematuria (10–19 per high power field). Excretory urography before treatment showed a 6 cm decrease (2.0 vertebral body height) of the right kidney and a 5 cm decrease of the left kidney on standing position as compared with measurements seen when the patient was in the supine position (Fig. 1A, 1B). She had no other disease that might be causing lumbago.

She was treated with oral administration of Hochu-ekki-to (Kampo), 7.5 g/day for 8 months. After 6 months, her symptoms gradually improved. After 8 months her pain completely disappeared without any adverse effect. Excretory urography showed a 3 cm decrease (1.0 vertebral body height) in the position of both kidneys from a supine position and her renal ptosis had visibly improved (Fig. 2A, 2B). Her

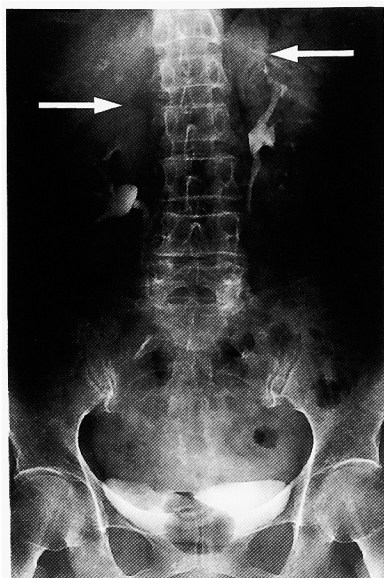


Fig. 2A. After the treatment, each kidney shown in the supine position.

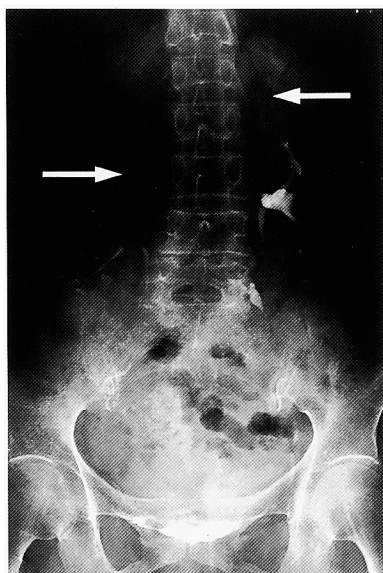


Fig. 2B. Excretory urography showing a 3 cm descent of each kidney in the upright position.

microscopic hematuria was also improved (1–9 per high power field). Her body weight had increased 2 kg in 8 months.

DISCUSSION

Renal ptosis is defined as a state of greater than physiological movement of the kidney in the standing position. Usually excretory urography shows movement across the height of 2 vertebral bodies. The movement seen in this patient is compatible with this definition. Renal ptosis is thought to be caused by weakness in the fatty tissue surrounding the kidney. It is frequently found in slender women, especially after delivery. The patient may have an uncomfortable feeling in the lower abdomen, or flank

pain, hypochondrial pain, back pain, urinary frequency, or microscopic hematuria.

There is no consensus on the ideal treatment. Recently, new laparoscopic surgical techniques have been applied to the treatment of symptomatic renal ptosis²⁾. However, clinical symptoms occasionally remain after surgical nephropexy. Hochu-ekki-to is used for general fatigue in a postsurgical state, for systemic visceral ptosis, for appetite loss, and for body weight loss in summer. It consists of water extract granules from ten dried plants³⁾.

We reported a case of renal ptosis in 1987⁴⁾. A 57-year-old woman had a greater than 9 cm decrease in the position of both kidneys. After 1 year of treatment with Hochu-ekki-to her symptoms resolved and excretory urography showed bilateral improvement. We have prescribed Hochu-ekki-to to many of our outpatients, and the efficacy rate of this medicine for this indication was 28% (8/29 cases). Other authors have reported efficacy of Hochu-ekki-to^{3,5)}. Horii et al. reported a high efficacy rate of 53% (35/66 cases) and a mild adverse effect rate of 7.5% (4/53 cases)³⁾.

The mechanism of action of Hochu-ekki-to remains unclear. The constituents of Hochu-ekki-to will improve various kinds of symptoms and signs as follows. Astragalus root, ginseng root, and citrus unshiu peel might increase muscular tension by stimulating both the central nerve system and appetite by increasing the metabolic rate⁶⁾. Ginseng root and bupleurum root have a biosynthetic effect and may increase the amount of connective tissue⁷⁾. The antispastic effect of the glycyrrhiza root may relieve pain⁸⁾. Jujube fruit may improve traction pain. Hochu-ekki-to is a mixture of herbs that might improve the symptoms of renal ptosis. A possibility of improvement of renal ptosis will be the increase of body weight and the increase of the perirenal fatty tissue will be useful for the support of the position of the kidney. MRI and CT should be useful to survey the mechanism of improvement of renal ptosis whether perirenal fatty tissue will increase.

We consider Hochu-ekki-to to be one of the best medicines for the treatment of renal ptosis.

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和文抄録

補中益気湯により症状が改善し排泄性尿路造影で治療効果を
確認した腎下垂の1症例

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59歳の女性。腰部の鈍痛を主訴に来院した。初診時に顕微鏡的血尿を認めた。排泄性尿路造影で右腎 6 cm，左腎 5 cm の腎下垂を認めた。補中益気湯エキス顆粒 7.5 g/日を内服投与した。6 カ月後より自覚症

状の改善を認め、8 カ月後には腎下垂は両側 3 cm と著明に改善した。副作用も認めず補中益気湯エキス顆粒は腎下垂の保存的治療に有用であると考えられた。

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